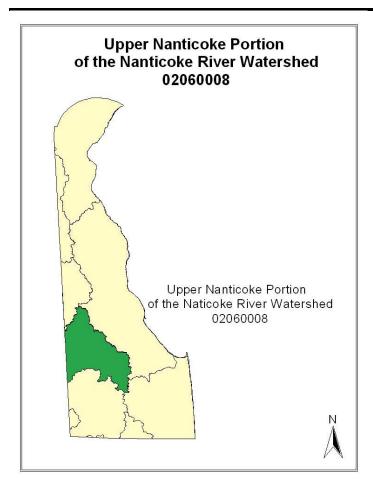


Upper Nanticoke River - 02060008 Supplement

8 Digit Hydrologic Unit Profile

June 2005



Introduction

production.

The Upper Portion of the Nanticoke River covers 96,440 acres. About 75 percent of this portion of the watershed is in Sussex County. The northern section of the Nanticoke River basin about 25 percent is in Kent County. There are a total of 201 farms located in the upper portion of the basin. The average farm size is 216 acres, but about 5 percent of the farms are between 500 and 1,000 acres and another 6 percent exceed 1.000 acres in size. There are 43.398 acres in farms in the watershed with 68 acres enrolled in the Conservation Reserve Program. Approximately 83 percent of the farmland or 36,020 acres is cropland. Corn, soybeans and wheat are the primary crops grown on about 82 percent of the acreage. Vegetables are grown on 17 percent of the acreage and hay and pasture account for the remaining one percent. Livestock operations are primarily based on poultry

Physical Description

| Landuse | Urban | Agriculture | Confined Feeding | Forest | Wetland | Water | Other | Total |
|---------|-------|-------------|---------------------|--------|---------|-------|-------|--------|
| Acres | 2,025 | 49,683 | 121 | 38,478 | 540 | 299 | 5,294 | 96,440 |
| Percent | 2.3 | 51.5 | 0.1 | 39.8 | 0.6 | 0.3 | 5.4 | 100.0 |

Source: Delaware Non-Point Source Pollution Assessment Report, based on 1984 land use.

Soils



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Digitized soils map information suitable for use in Toolkit is available for the entire watershed.

Primary soils in the watershed include:

- Evesboro-Rumsford
- Fallsington-Saasafras-Woodstown

The Evesboro-Rumsford Association accounts for about 47 Percent of the soils in Sussex County and the majority of soils in the watershed. The area it encompasses surrounds Seaford and Laurel and includes most of the Nanticoke River Watershed. The landscape is mostly nearly level or gently sloping, but locally there are moderately sloping, dunelike ridges, some depressions and potholes and steeper slopes bordering some major streams. Evesboro soils are droughty and Rumford soils are somewhat droughty. Evesboro and rumford soils are suited to most crops grown in the county, including corn, soybeans, melons, and various truck or cannery crops. Droughtiness is the main limitation but supplemental irrigation is readily available. Erosion generally is not a problem, but in areas where water is concentrated by a road or other structure there is a hazard of gullying. If the surface soil is unprotected, loose and dry, blowing sand is a hazard to young tender seedlings. Most of this association is suited to residential and other nonfarm uses, but there are some limitations that result from the loose, sandy nature of the major soils.

The Fallsington-Sassafras-Woodstown Association occupies about 12 percent of the land area in the county. The largest area is in the northwestern part of the county in the upper reaches of the Nanticoke River Basin. It also extends into the Kent County portion of the watershed. There is another large area about 4 miles east of Bridgeville. The landscape is a broad, nearly level upland that has many depressions and small drainageways. There are few major streams, but the association includes the headwaters of the Nanticoke River. A large part of the association is naturally wet, and at least half of it is covered with second-growth hardwoods.

The Sassafras soils are well drained and the Woodstown soils are moderately well drained. Farming is limited to the Sassafras soils and the parts of the Fallsington and Woodstown that have been artificially drained. Corn and soybeans are the principal crops.

Sasafras soils have few limitations for nonfarm uses. Nearly all the houses and buildings are on these soils. Woodstown and Fallsington soils have moderate to severe limitations for most non farm uses.



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Resource Concerns

The primary resource concern in the watershed is nutrient loading to ground and surface waters. In order to meet the basic Tier I requirement for inclusion in the CSP program farm operators must be addressing nutrient and erosion issues in their conservation plans. To qualify for Tier II farm operators must be focused on addressing wildlife habitat issues in their farm plans. Nutrients are also the focus of the CSP Tier II requirement. The state has designated both the surface and ground waters in the Nanticoke watershed to be of high concern for water quality. Ground water provided through private and municipal wells is the major source of water for agriculture, industry and residential drinking water in the watershed. Base flow provided by ground water is also considered the primary supplier of fresh water to streams and is a very direct source of nutrients and other pollutants to surface waters.



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Farm Community

The information in the following table was compiled based on data from the 2002 Census of Agriculture. It can be used to estimate the potential number of limited resource, and beginning or new farmers in the watershed.

| | Total Farms | No. of Farms | | Principal Operators | | | New Operators | |
|-------------------------------------|----------------|--------------------------------|-------------------------------------|---------------------|--------|---------------|------------------------------|--|
| CSP W/S | | Less than median size | With sales less than \$40,000 | Male | Female | Non- White | Less than 3 years on farm | |
| Nanticoke River & BW Wicomico | 201 | 157 | 67 | 170 | 31 | 6 | 3 | |
| Percent | | 54.6 % | 33.4 % | 84.8 % | 15.2 % | 3.1 % | 1.3 % | |